

## STN- Structure Search

10/577,834

d ibib abs hitstr 1-2

10/12/07

*inventor*

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2005:451115 CAPLUS  
 DOCUMENT NUMBER: 143:7605  
 TITLE: A preparation of azabicyclo[3.2.1]octane derivatives,  
 useful as M3 muscarinic acetylcholine receptor  
 antagonists  
 INVENTOR(S): Wan, Zehong; Yan, Hongxing; Palovich, Michael R.;  
 Laine, Dramane I.; Lee, Dennis; Stavenger, Robert A.;  
 Goodman, Krista B.; Hilfiker, Mark A.; Cui, Haifeng;  
 Viet, Andrew W.; Marino, Joseph P.  
 PATENT ASSIGNEE(S): Glaxo Group Limited, UK  
 SOURCE: PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005046586	A2	20050526	WO 2004-US36663	20041104
WO 2005046586	A3	20050728		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1682142	A2	20060726	EP 2004-810294	20041104
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR, IS				
JP 2007510731	T	20070426	JP 2006-539633	20041104
US 2007129396	A1	20070607	US 2006-577834	20060501
PRIORITY APPLN. INFO.:			US 2003-517243P	P 20031104
			WO 2004-US36663	W 20041104
OTHER SOURCE(S): GI	CASREACT 143:7605; MARPAT 143:7605			

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

- AB The invention relates to a preparation of azabicyclo[3.2.1]octane derivs. of formula I-X- [wherein: X- is an anion; R1 is alkyl, alkenyl, alkylcycloalkyl, or alkyl-OMe, etc.; R2 is (cyclo)alkyl, heterocycloalkyl, or cycloalkylalkyl, etc.], useful as M3 muscarinic acetylcholine receptor antagonists (no biol. data). For instance, quaternary azabicyclo[3.2.1]octane derivative II-Br- was prepared via quaternization of N-methylazabicyclo[3.2.1]octane derivative III by cyclopropylmethyl bromide with a yield of 51%.
- IT 852436-01-2P 852436-02-3P 852460-99-2P  
 852461-00-8P 852461-01-9P 852461-02-0P  
 852461-03-1P 852461-04-2P 852461-05-3P  
 852461-06-4P 852461-07-5P 852461-08-6P  
 852461-09-7P 852461-10-0P 852461-11-1P

10/577,834

852461-12-2P 852461-13-3P 852461-14-4P

852461-18-8P

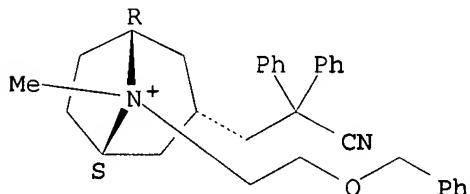
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azabicyclo[3.2.1]octane derivs. useful as M3 muscarinic acetylcholine receptor antagonists)

RN 852436-01-2 CAPPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-[2-(phenylmethoxy)ethyl]-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

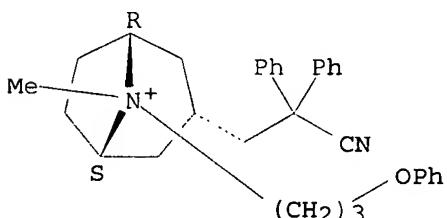


● Br<sup>-</sup>

RN 852436-02-3 CAPPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(3-phenoxypropyl)-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

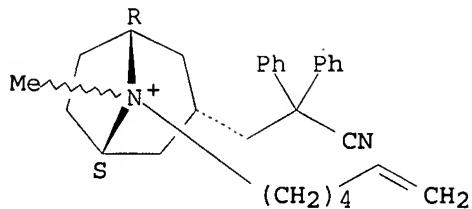


● Br<sup>-</sup>

RN 852460-99-2 CAPPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-(5-hexenyl)-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

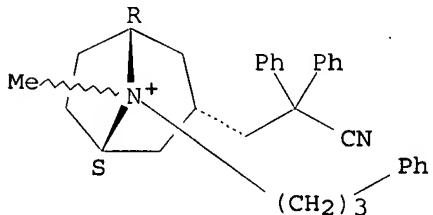
Relative stereochemistry.



● Br<sup>-</sup>

RN 852461-00-8 CAPLUS  
CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(3-phenylpropyl)-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

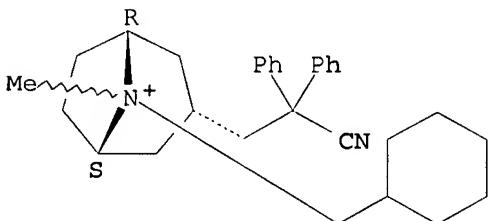
Relative stereochemistry.



● Br<sup>-</sup>

RN 852461-01-9 CAPLUS  
CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-(cyclohexylmethyl)-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

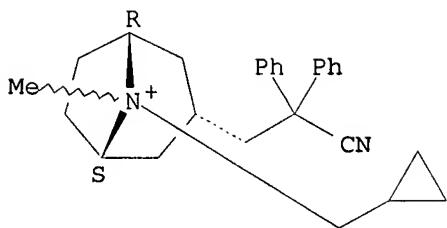
Relative stereochemistry.



● Br<sup>-</sup>

RN 852461-02-0 CAPLUS  
CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-(cyclopropylmethyl)-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

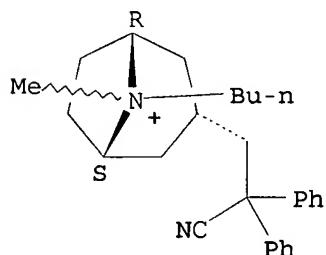
Relative stereochemistry.



● Br<sup>-</sup>

RN 852461-03-1 CAPLUS  
CN 8-Azoniabicyclo[3.2.1]octane, 8-butyl-3-(2-cyano-2,2-diphenylethyl)-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

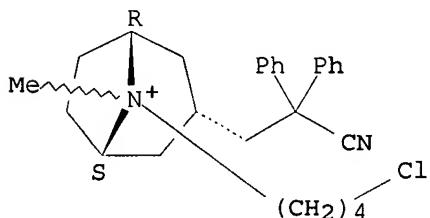
Relative stereochemistry.



● Br<sup>-</sup>

RN 852461-04-2 CAPLUS  
CN 8-Azoniabicyclo[3.2.1]octane, 8-(4-chlorobutyl)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

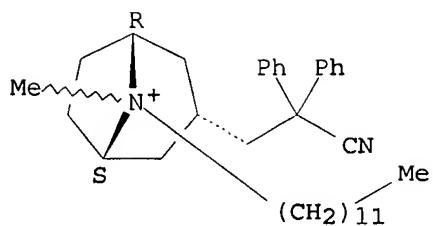
Relative stereochemistry.



● Br<sup>-</sup>

RN 852461-05-3 CAPLUS  
CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-dodecyl-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

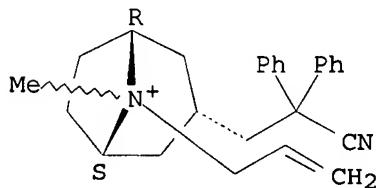


● Br<sup>-</sup>

RN 852461-06-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(2-propenyl)-, iodide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

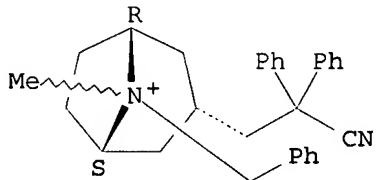


● I<sup>-</sup>

RN 852461-07-5 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(phenylmethyl)-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

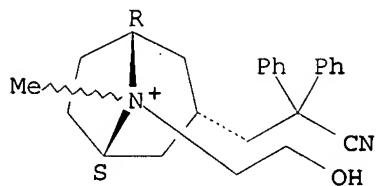


● Br<sup>-</sup>

RN 852461-08-6 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-(2-hydroxyethyl)-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

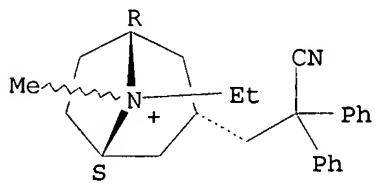
Relative stereochemistry.



● Br<sup>-</sup>

RN 852461-09-7 CAPLUS  
CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-ethyl-8-methyl-, bromide, (3-endo,8-syn) - (9CI) (CA INDEX NAME)

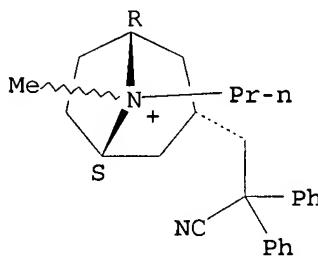
Relative stereochemistry.



● Br<sup>-</sup>

RN 852461-10-0 CAPLUS  
CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-propyl-, bromide, (3-endo,8-syn) - (9CI) (CA INDEX NAME)

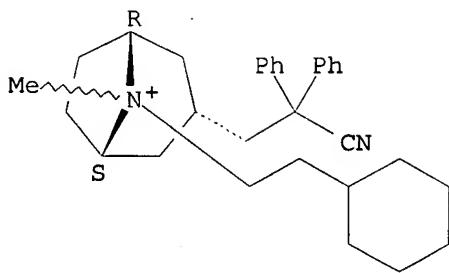
Relative stereochemistry.



● Br<sup>-</sup>

RN 852461-11-1 CAPLUS  
CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-(2-cyclohexylethyl)-8-methyl-, bromide, (3-endo,8-syn) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

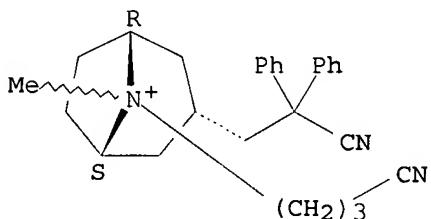


● Br<sup>-</sup>

RN 852461-12-2 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-(3-cyanopropyl)-8-methyl-, bromide, (3-endo,8-syn) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

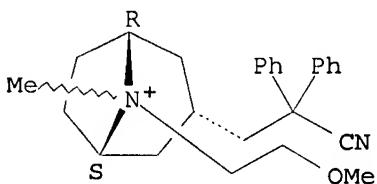


● Br<sup>-</sup>

RN 852461-13-3 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-(2-methoxyethyl)-8-methyl-, bromide, (3-endo,8-syn) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

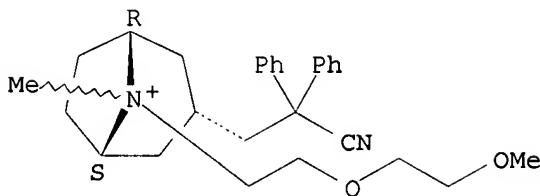


● Br<sup>-</sup>

RN 852461-14-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-[2-(2-methoxyethoxy)ethyl]-8-methyl-, bromide, (3-endo,8-syn) - (9CI) (CA INDEX NAME)

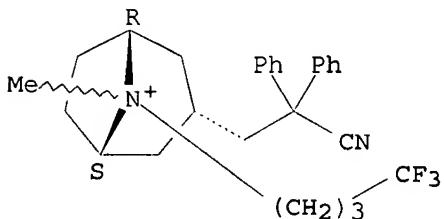
Relative stereochemistry.

● Br<sup>-</sup>

RN 852461-18-8 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(4,4,4-trifluorobutyl)-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

● Br<sup>-</sup>

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:369284 CAPLUS

DOCUMENT NUMBER: 142:423894

TITLE: 8-Methyl-8-azabicyclo[3.2.1]octane derivative  
muscarinic acetylcholine receptor antagonists, their  
preparation, and their therapeutic useINVENTOR(S): Busch-Petersen, Jakob; Palovich, Michael R.; Wan,  
Zehong; Yan, Hongxing; Zhu, Chongjie

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005037280	A1	20050428	WO 2004-US33638	20041012
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,				

SN, TD, TG

AU 2004281724	A1	20050428	AU 2004-281724	20041012
CA 2542657	A1	20050428	CA 2004-2542657	20041012
EP 1677795	A1	20060712	EP 2004-794886	20041012
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				
BR 2004015361	A	20061212	BR 2004-15361	20041012
CN 1893948	A	20070110	CN 2004-80037266	20041012
JP 2007508390	T	20070405	JP 2006-535591	20041012
IN 2006DN01834	A	20070824	IN 2006-DN1834	20060404
US 2007105895	A1	20070510	US 2006-575839	20060413
US 7276521	B2	20071002		
MX 2006PA04244	A	20060628	MX 2006-PA4244	20060417
NO 2006002042	A	20060508	NO 2006-2042	20060508
US 2007238752	A1	20071011	US 2007-766371	20070621
AU 2007203077	A1	20070719	AU 2007-203077	20070702
AU 2007203078	A1	20070719	AU 2007-203078	20070702
PRIORITY APPLN. INFO.:				
			US 2003-511009P	P 20031014
			AU 2004-281724	A3 20041012
			WO 2004-US33638	W 20041012
			US 2006-575839	A1 20060413

OTHER SOURCE(S): MARPAT 142:423894

AB 8-Methyl-8-azabicyclo[3.2.1]octane derivative muscarinic acetylcholine receptor antagonists are provided. Compound preparation is included. Compds. of the invention may be used to treat muscarinic acetylcholine receptor-mediated diseases.

IT 850607-57-7P 850607-58-8P 850607-67-9P

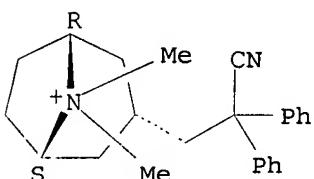
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(azabicyclooctane derivative muscarinic acetylcholine receptor antagonists, preparation, and therapeutic use)

RN 850607-57-7 CAPPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8,8-dimethyl-, iodide, (3-endo) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

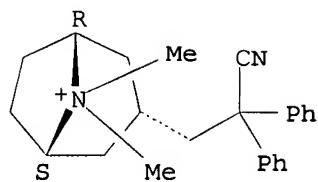


● I-

RN 850607-58-8 CAPPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-diphenylethyl)-8,8-dimethyl-, bromide, (3-endo) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

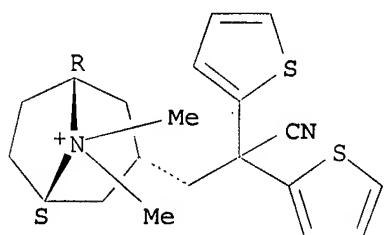


● Br<sup>-</sup>

RN 850607-67-9 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-cyano-2,2-di-2-thienylethyl)-8,8-dimethyl-, iodide, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● I<sup>-</sup>

REFERENCE COUNT:

2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

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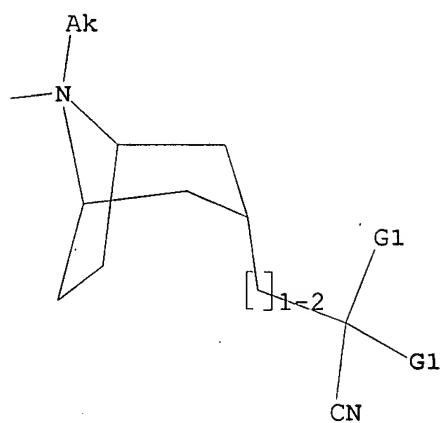
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L1 STRUCTURE uploaded  
L2 2 S L1  
L3 43 S L1 FULL

FILE 'CAPLUS' ENTERED AT 16:21:37 ON 12 OCT 2007  
L4 2 S L3

=> d l1  
L1 HAS NO ANSWERS  
L1 STR

10/577,834



G1 Cy,Ak

Structure attributes must be viewed using STN Express query preparation.

=>